## PART 7. REPORTING

# (Subpart A – Public Notification and Consumer Information

### **NEW SECTION**

WAC 246-290-71001 Public notification. The purveyor shall notify the owner or operator of any consecutive water system served and/or the appropriate water system users in accordance with 40 CFR 141.201 when the system:

- (1) <u>Has a violation of the National Primary Drinking Water Regulations and for other situations as listed in Table 1 of 40 CFR 141.201;</u>
  - (2) <u>Is issued a departmental order;</u>
  - (3) Fails to comply with a departmental order; or
  - (4) <u>Is issued a category red operating permit.</u>

## **NEW SECTION**

WAC 246-290-71002 Public notice content. (1) Public notices for violations and for other situations referenced in WAC 246-290-71001(1) shall contain the elements, standard language and be presented in accordance with 40 CFR 141.205. Except that notification of the availability of unregulated contaminant results and exceeding the secondary MCL for fluoride shall be in accordance with WAC 246-290-71004. Exceedances of the nitrate MCL by certain non-community water systems as referenced in WAC 246-290-310, Table 4, Nitrate footnote, shall also be in accordance with WAC 246-290-71004.

- (2) Public notices when issued a departmental order, category red operating permit, or failing to comply with a departmental order shall include:
- (a) A clear, concise, and simple explanation of the violation;
- (b) <u>Discussion of potential adverse health effects and any segments of the population that may be at higher risk;</u>
  - (c) Mandatory health effects information in accordance with WAC 246-290-71004(2);
  - (d) A list of steps the purveyor has taken or is planning to take to remedy the situation;
- (e) A list of steps the consumer should take, including advice on seeking an alternative water supply if necessary;
  - (f) The purveyors name and telephone number; and
  - (g) When appropriate, notices shall be bilingual or multilingual.

Note: The purveyor may provide additional information to further explain the situation.

## **NEW SECTION**

WAC 246-290-71003 Public notification distribution. (1) Purveyors must provide public notice when violations occur of the National Primary Drinking Water Regulations and for other situations as referenced in WAC 246-290-71001(1). The violation category and Tier designation is determined in accordance with Table 2 of 40 CFR 141.201. Notice to new billing units and water system users must be given in accordance with 40 CFR 141.206;

- (a) The form, manner, timing and frequency of notice for a Tier 1 public notice shall be in accordance with 40 CFR 141.202.
- (b) The form, manner, timing and frequency of notice for a Tier 2 public notice shall be in accordance with 40 CFR 141.203.
- (c) The form, manner, timing and frequency of notice for a Tier 3 public notice shall be in accordance with 40 CFR 141.204.
- (2) Purveyors of community, NTNC and TNC systems shall provide notice to water system users as described in this subsection within three months of the receipt of a departmental order, a category red operating permit, and/or failing to comply with a departmental order.
- (a) <u>Purveyors of community and NTNC systems shall provide newspaper notice to water</u> system users.
- (i) <u>"Newspaper notice"</u>, as used above, means publication in a daily newspaper of general WAC (3/28/02 2:19 PM) [ 1 ]

circulation or in a weekly newspaper of general circulation if a daily newspaper does not serve the area. The purveyor may substitute a community or homeowner's association newsletter or similar periodical publication if the newspaper reaches all affected consumers within the specified time.

- (ii) The purveyor shall substitute a posted notice in the absence of a newspaper of general circulation or homeowner's association newsletter or similar periodical publication. The purveyor shall post the notice within the time frame specified in this subsection.
- (b) Purveyors of TNC systems shall post a notice or notify consumers by other methods authorized by the department.
- (c) The purveyor shall place posted notices in conspicuous locations and present the notices in a manner making them easy to read. Notices shall remain posted until the violation is corrected.
- (d) The purveyor of a community or NTNC water system shall give a copy of the most recent public notice for all outstanding violations to all new billing units or new hookups before or at the time water service begins.

### **NEW SECTION**

WAC 246-290-71004 Public notification mandatory language. (1) The purveyor shall provide specific health effects language in the notice for violations and for other situations referenced in WAC 246-290-71001(1) in accordance with 40 CFR 141.205. Except that notification of the availability of unregulated contaminant results and exceeding the secondary MCL for fluoride shall be in accordance with WAC 246-290-71004. Exceedances of the nitrate MCL by certain non-community water systems as referenced in WAC 246-290-310, Table 4, Nitrate footnote, shall also be in accordance with WAC 246-290-71004.

- (2) The purveyor shall provide specific mandatory language, contained in department guidance, in its notification when the purveyor:
- (a) <u>Is issued a departmental order;</u>
- (b) <u>Is issued a category red operating permit; or</u>
- (c) Fails to comply with a departmental order.

## **NEW SECTION**

WAC 246-290-71005 Special public notification requirements. (1) Special notice of the availability of unregulated contaminant monitoring results.

- (a) The purveyor of a community water system required to monitor under 40 CFR 141.40 and WAC 246-290-300(9), must notify persons served by the system of the availability of the results of such sampling no later than twelve months after the monitoring results are known, in accordance with 40 CFR 141.207.
- (b) The form and manner of the public notice must follow the requirements for a Tier 3 public notice prescribed in 40 CFR 141.204(c), (d)(1), and (d)(3). The notice must also identify a person and provide the telephone number to contact for information on the monitoring results.
- (2) When a secondary MCL violation for fluoride occurs, the purveyor of a community water system shall send notice, in accordance with 40 CFR 141.208.
  - (3) Special notice for nitrate exceedances above the MCL by NTNC water systems.
- (a) The purveyor of a NTNC water system that has been granted permission by the department to exceed the nitrate MCL under 40 CFR 141.11(d) must provide notice to water users served according to the requirements for a Tier 1 notice under 40 CFR 141.202(a) and (b).
- (b) The form and manner of the special notice must be done in a manner consistent with 40 CFR 141.209(b).

## **NEW SECTION**

WAC 246-290-71006 Consumer information. The purveyor shall provide consumer information within thirty days of receipt of confirmation sample results when the department determines that a substance not included in this chapter is confirmed at a level greater than a SAL.

- (1) <u>Consumer information shall include:</u>
- (a) Name and level of chemical detected:
- (b) Location where the chemical was detected;

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- (c) Any health effects that the chemical could cause at its present concentration;
- (d) Plans for follow-up activities; and
- (e) The purveyors name and telephone number.
- (2) Consumer information shall be distributed by any of the following methods:
- (a) Notice placed in the major newspaper in the affected area;
- (b) <u>Direct mail to consumers;</u>
- (c) Posting for a least one week if a NTNC system; or
- (d) Any other method approved by the department.

### **NEW SECTION**

WAC 246-290-71007 Public notification special provisions. (1) When circumstances dictate, the purveyor shall give a broader or more immediate notice to protect public health. The department may require the purveyor's notification by whatever means necessary.

(2) When the state board of health grants a public water system a waiver, the purveyor shall notify consumers and new billing units or new customers before water service begins. The purveyor shall provide a notice annually and send a copy to the department.

(3) The department may give notice to the water system users as required by this section on behalf of the water purveyor, if the department complies with Part 7, subpart A of this chapter. However, the purveyor remains responsible for ensuring the department's requirements are met.)

#### Subpart B - Consumer Confidence Reports

WAC 246-290-72001 Purpose and applicability of the consumer confidence report requirements. WAC 246-290-72001 through 246-290-72012 establishes minimum requirements for the content of annual reports that community water systems must deliver to their customers. These reports must contain information on the quality of the water delivered by the systems and characterize the risks (if any) from exposure to contaminants detected in the drinking water in an accurate and understandable manner.

- (1) Notwithstanding the provisions of WAC 246-290-020, this section applies only to community water systems.
  - (2) For the purpose of WAC 246-290-72001 through 246-290-72012:
- (a) "Customers" means billing units or service connections to which water is delivered by a community water system.
- (b) "Detected" means at or above the levels prescribed by WAC 246-290-300(4) for inorganic contaminants, at or above the levels prescribed by WAC 246-290-300(7) for organic contaminants, and at or above the levels prescribed by 40 CFR 141.25(c) for radioactive contaminants.

[Statutory Authority: RCW 43.20.050. 00-15-080, § 246-290-72001, filed 7/19/00, effective 8/19/00.]

**WAC 246-290-72002 Reporting dates.** (1) Each existing community water system must deliver its report by July 1 annually. Each annual report must contain data collected during, or prior to, the previous calendar year as required by WAC 246-290-72005(3).

- (2) A new community water system must deliver its first report by July 1 of the year after its first full calendar year in operation and annually thereafter.
- (3) A community water system that sells water to another community water system must deliver the applicable information required in WAC 246-290-72003 through 246-290-72009 to the buyer system:
  - (a) No later than April 1 annually; or
- (b) On a date mutually agreed upon by the seller and the purchaser, and specifically included in a contract between the parties.

WAC 246-290-72003 Report contents--Source water. Information on the source of the water delivered:

- (1) Each report must identify the source(s) of the water delivered by the community water system by providing information on:
- (a) The type of the water, for example, surface water, ground water, spring water, or purchased water: and
  - (b) The commonly used name (if any) and location of the body (or bodies) of water.
- (2) If a source water assessment has been completed, the report must notify consumers of the availability of this information and the means to obtain it. In addition, systems are encouraged to highlight in the report significant sources of contamination in the source water area if they have readily available information.
- (3) Where a system has received a source water assessment from the department, the report must include a brief summary of the system's susceptibility to potential sources of contamination, using language provided by the department or written by the purveyor.

[Statutory Authority: RCW 43.20.050. 00-15-080, § 246-290-72003, filed 7/19/00, effective 8/19/00.]

WAC 246-290-72004 Report contents--Definitions. (1) Each report must include the following definitions:

- (a) Maximum contaminant level goal or MCLG: The level of a contaminant in drinking water below which there is no known or expected risk to health. MCLGs allow for a margin of safety.
- (b) Maximum contaminant level or MCL: The highest level of a contaminant that is allowed in drinking water. MCLs are set as close to the MCLGs as feasible using the best available treatment technology.
- (2) A report for a community water system operating under a variance or an exemption issued under WAC 246-290-060 must include the following definition: Variances and exemptions: State or EPA permission not to meet an MCL or a treatment technique under certain conditions.
- (3) A report that contains data on contaminants that the Environmental Protection Agency regulates using any of the following terms must include the applicable definitions:
- (a) Treatment technique: A required process intended to reduce the level of a contaminant in drinking water.
- (b) Action level: The concentration of a contaminant which, if exceeded, triggers treatment or other requirements which a water system must follow.
- (c) Maximum residual disinfectant level goal or MRDLG: The level of a drinking water disinfectant below which there is no known or expected risk to health. MRDLGs do not reflect the benefits of the use of disinfectants to control microbial contaminants.
- (d) Maximum residual disinfectant level or MRDL: The highest level of a disinfectant allowed in drinking water. There is convincing evidence that addition of a disinfectant is necessary for control of microbial contaminants.

[Statutory Authority: RCW 43.20.050. 00-15-080, § 246-290-72004, filed 7/19/00, effective 8/19/00.]

WAC 246-290-72005 Report contents--Information on detected contaminants. (1) This section specifies the requirements for information to be included in each report for contaminants subject to mandatory monitoring. It applies to:

- (a) Contaminants subject to an MCL, action level, maximum residual disinfectant level or treatment technique (regulated contaminants);
  - (b) Contaminants for which monitoring is required by WAC 246-290-300(8); and
- (c) Disinfection by-products for which monitoring is required by WAC 246-290-300(6) and 40 CFR 141.142 or microbial contaminants for which monitoring is required by WAC 246-290-300(3) and 40 CFR 141.143, except as provided under WAC 246-290-72006(1), and which are detected in the finished water.

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- (2) The data relating to these contaminants must be displayed in one table or in several adjacent tables. Any additional monitoring results which a community water system chooses to include in its report must be displayed separately.
- (3) The data must be derived from data collected to comply with the Environmental Protection Agency and state monitoring and analytical requirements during the previous calendar year except that:
- (a) Where a system is allowed to monitor for regulated contaminants less than once a year, the table(s) must include the date and results of the most recent sampling and the report must include a brief statement indicating that the data presented in the report are from the most recent testing done in accordance with the regulations. No data older than five years need be included.
- (b) Results of monitoring in compliance with 40 CFR 141.142 and 40 CFR 141.143 need only be included for five years from the date of last sample or until any of the detected contaminants becomes regulated and subject to routine monitoring requirements, whichever comes first.
  - (4) For detected regulated contaminants listed in WAC 246-290-72012, the table(s) must contain:
- (a) The MCL for that contaminant expressed as a number equal to or greater than 1.0 (as provided in WAC 246-290-72012);
  - (b) The MCLG for that contaminant expressed in the same units as the MCL;
- (c) If there is no MCL for a detected contaminant, the table must indicate that there is a treatment technique, or specify the action level, applicable to that contaminant, and the report must include the definitions for treatment technique and/or action level, as appropriate, specified in WAC 246-290-72004;
- (d) For contaminants subject to an MCL, except turbidity and total coliforms, the highest contaminant level used to determine compliance with a National Primary Drinking Water Regulation and the range of detected levels, as follows:
- (i) When compliance with the MCL is determined annually or less frequently: The highest detected level at any sampling point and the range of detected levels expressed in the same units as the MCL.
- (ii) When compliance with the MCL is determined by calculating a running annual average of all samples taken at a sampling point: The highest average of any of the sampling points and the range of all sampling points expressed in the same units as the MCL.
- (iii) When compliance with the MCL is determined on a system-wide basis by calculating a running annual average of all samples at all sampling points: The average and range of detection expressed in the same units as the MCL.
- (iv) Note to WAC 246-290-72005 (4)(d): When rounding of results to determine compliance with the MCL is allowed by the regulations, rounding should be done prior to multiplying the results by the factor listed in WAC 246-290-72012;
  - (e) For turbidity.
- (i) When it is reported pursuant to chapter 246-290 WAC Part 6, Subpart C: The highest average monthly value.
- (ii) When it is reported pursuant to the requirements of chapter 246-290 WAC Part 6, Subpart D: The highest monthly value. The report should include an explanation of the reasons for measuring turbidity.
- (iii) When it is reported pursuant to chapter 246-290 WAC Part 6, Subpart B: The highest single measurement and the lowest monthly percentage of samples meeting the turbidity limits specified in chapter 246-290 WAC Part 6, Subpart B for the filtration technology being used. The report should include an explanation of the reasons for measuring turbidity;
- (f) For lead and copper: The 90th percentile value of the most recent round of sampling and the number of sampling sites exceeding the action level;
  - (g) For total coliform:
- (i) The highest monthly number of positive samples for systems collecting fewer than 40 samples per month; or
- (ii) The highest monthly percentage of positive samples for systems collecting at least 40 samples per month;
  - (h) For fecal coliform: The total number of positive samples; and
- (i) The likely source(s) of detected contaminants to the best of the purveyor's knowledge. Specific information regarding contaminants may be available in sanitary surveys and source water assessments, and should be used when available to the purveyor. If the purveyor lacks specific

information on the likely source, the report must include one or more of the typical sources for that contaminant listed in WAC 246-290-72012 which are most applicable to the system.

- (5) If a community water system distributes water to its customers from multiple hydraulically independent distribution systems that are fed by different raw water sources, the table should contain a separate column for each service area and the report should identify each separate distribution system. Alternatively, systems could produce separate reports tailored to include data for each service area.
- (6) The table(s) must clearly identify any data indicating violations of MCLs, MRDLs, or treatment techniques and the report must contain a clear and readily understandable explanation of the violation including: The length of the violation, the potential adverse health effects, and actions taken by the system to address the violation. To describe the potential health effects, the system must use the relevant language of WAC 246-290-72012.
- (7) For detected unregulated contaminants for which monitoring is required, the table(s) must contain the average and range at which the contaminant was detected. The report may include a brief explanation of the reasons for monitoring for unregulated contaminants.

[Statutory Authority: RCW 43.20.050. 00-15-080, § 246-290-72005, filed 7/19/00, effective 8/19/00.]

WAC 246-290-72006 Report contents--Information on Cryptosporidium, radon, and other contaminants. (1) If the system has performed any monitoring for Cryptosporidium, including monitoring performed to satisfy the requirements of 40 CFR 141.143 which indicates that Cryptosporidium may be present in the source water or the finished water, the report must include:

- (a) A summary of the results of the monitoring; and
- (b) An explanation of the significance of the results.
- (2) If the system has performed any monitoring for radon which indicates that radon may be present in the finished water, the report must include:
  - (a) The results of the monitoring; and
  - (b) An explanation of the significance of the results.
- (3) If the system has performed additional monitoring which indicates the presence of other contaminants in the finished water, the department strongly encourages systems to report any results which may indicate a health concern. To determine if results may indicate a health concern, the department recommends that systems find out if the Environmental Protection Agency has proposed a National Primary Drinking Water Regulation or issued a health advisory for that contaminant by calling the Safe Drinking Water Hotline (800-426-4791). The Environmental Protection Agency considers detects above a proposed MCL or health advisory level to indicate possible health concerns. For such contaminants, the department recommends that the report include:
  - (a) The results of the monitoring; and
- (b) An explanation of the significance of the results noting the existence of a health advisory or a proposed regulation.

[Statutory Authority: RCW 43.20.050. 00-15-080, § 246-290-72006, filed 7/19/00, effective 8/19/00.]

WAC 246-290-72007 Report contents--Compliance with National Primary Drinking Water Regulations. In addition to the requirements of WAC 246-290-72005(6), the report must note any violation that occurred during the year covered by the report of a requirement listed below, and include a clear and readily understandable explanation of the violation, any potential adverse health effects, and the steps the system has taken to correct the violation.

- (1) Monitoring and reporting of compliance data;
- (2) Filtration and disinfection prescribed by chapter 246-290 WAC, Part 6. For systems which have failed to install adequate filtration or disinfection equipment or processes, or have had a failure of such equipment or processes which constitutes a violation, the report must include the following language as part of the explanation of potential adverse health effects: Inadequately treated water may contain disease-causing organisms. These organisms include bacteria, viruses, and parasites which can cause symptoms such as nausea, cramps, diarrhea, and associated headaches.

- (3) Lead and copper control requirements prescribed by WAC 246-290-025, specifically CFR 141.80 through 141.91: For systems which fail to take one or more actions prescribed by WAC 246-290-025, specifically CFR 141.80 through 141.84, the report must include the applicable language of WAC 246-290-72012 for lead, copper, or both.
- (4) Treatment techniques for Acrylamide and Epichlorohydrin prescribed by 40 CFR, Subpart K. For systems which violate the requirements of 40 CFR, Subpart K, the report must include the relevant language from WAC 246-290-72012.
  - (5) Recordkeeping of compliance data.
- (6) Special monitoring requirements prescribed by WAC 246-290-300(8) (unregulated contaminants) and 246-290-310(3) (sodium); and
  - (7) Violation of the terms of a variance, an exemption, or an administrative or judicial order.

[Statutory Authority: RCW 43.20.050. 00-15-080, § 246-290-72007, filed 7/19/00, effective 8/19/00.]

WAC 246-290-72008 Report contents--Variances and exemptions. If a system is operating under the terms of a variance or an exemption issued under WAC 246-290-060, the report must contain:

- (1) An explanation of the reasons for the variance or exemption;
- (2) The date on which the variance or exemption was issued;
- (3) A brief status report on the steps the system is taking to install treatment, find alternative sources of water, or otherwise comply with the terms and schedules of the variance or exemption; and
- (4) A notice of any opportunity for public input in the review, or renewal, of the variance or exemption.

[Statutory Authority: RCW 43.20.050. 00-15-080, § 246-290-72008, filed 7/19/00, effective 8/19/00.]

- **WAC 246-290-72009 Report contents--Additional information.** (1) The report must contain a brief explanation regarding contaminants which may reasonably be expected to be found in drinking water including bottled water. This explanation may include the language of (a) through (c) of this subsection or systems may use their own comparable language. The report also must include the language of (d) of this subsection.
- (a) The sources of drinking water (both tap water and bottled water) include rivers, lakes, streams, ponds, reservoirs, springs, and wells. As water travels over the surface of the land or through the ground, it dissolves naturally occurring minerals and, in some cases, radioactive material, and can pick up substances resulting from the presence of animals or from human activity.
  - (b) Contaminants that may be present in source water include:

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- (i) Microbial contaminants, such as viruses and bacteria, which may come from sewage treatment plants, septic systems, agricultural livestock operations, and wildlife.
- (ii) Inorganic contaminants, such as salts and metals, which can be naturally occurring or result from urban storm water runoff, industrial or domestic wastewater discharges, oil and gas production, mining, or farming.
- (iii) Pesticides and herbicides, which may come from a variety of sources such as agriculture, urban storm water runoff, and residential uses.
- (iv) Organic chemical contaminants, including synthetic and volatile organic chemicals, which are by-products of industrial processes and petroleum production, and can also come from gas stations, urban storm water runoff, and septic systems.
- (v) Radioactive contaminants, which can be naturally occurring or be the result of oil and gas production and mining activities.
- (c) In order to ensure that tap water is safe to drink, the Environmental Protection Agency and/or the Washington state board of health prescribes regulations that limit the amount of certain contaminants in water provided by public water systems. Food and Drug Administration and/or the Washington state department of agriculture regulations establish limits for contaminants in bottled water that must provide the same protection for public health.
- (d) Drinking water, including bottled water, may reasonably be expected to contain at least small amounts of some contaminants. The presence of contaminants does not necessarily indicate that water

poses a health risk. More information about contaminants and potential health effects can be obtained by calling the Environmental Protection Agency's Safe Drinking Water Hotline (800-426-4791).

- (2) The report must include the telephone number of the owner, operator, or designee of the community water system as a source of additional information concerning the report.
- (3) In communities with a large proportion of non-English speaking residents, the report must contain information in the appropriate language(s) regarding the importance of the report or contain a telephone number or address where such residents may contact the system to obtain a translated copy of the report or assistance in the appropriate language.
- (4) The report must include information about opportunities for public participation in decisions that may affect the quality of the water, such as the time and place of meetings.
- (5) The systems may include such additional information as they deem necessary for public education consistent with, and not detracting from, the purpose of the report.

[Statutory Authority: RCW 43.20.050. 00-15-080, § 246-290-72009, filed 7/19/00, effective 8/19/00.]

WAC 246-290-72010 Report contents--Required additional health information. All reports must prominently display the following language: Some people may be more vulnerable to contaminants in drinking water than the general population. Immuno-compromised persons such as persons with cancer undergoing chemotherapy, persons who have undergone organ transplants, people with HIV/AIDS or other immune system disorders, some elderly, and infants can be particularly at risk from infections. These people should seek advice about drinking water from their health care providers. Environmental Protection Agency/Centers for Disease Control guidelines on appropriate means to lessen the risk of infection by Cryptosporidium and other microbial contaminants are available from the Safe Drinking Water Hotline (800-426-4791).

- (1) (<u>Beginning in the report due by July 1, 2002.</u>) <u>A</u> system which detects arsenic ((at)) levels above ((<u>25 micrograms per liter, but below the</u>)) (0.005 mg/L and up to and including 0.01 mg/L):
- (a) Must include in its report a short informational statement about arsenic, using language such as: ((EPA is reviewing the drinking water standard for arsenic because of special concerns that it may not be stringent enough. Arsenic is a naturally occurring mineral known to cause cancer in humans at high concentrations.)) (While your drinking water meets EPA's standard for arsenic, it does contain low levels of arsenic. EPA's standard balances the current understanding of arsenic's possible health effects against the low cost of removing arsenic from drinking water. EPA continues to research the health effects of low levels of arsenic, which is a mineral known to cause cancer in humans at high concentrations and is linked to other health effects such as skin damage and circulatory problems.)
  - (b) May write its own educational statement, but only in consultation with the department.
  - (2) A system which detects nitrate at levels above 5 mg/l, but below the MCL:
- (a) Must include a short informational statement about the impacts of nitrate on children using language such as: Nitrate in drinking water at levels above 10 ppm is a health risk for infants of less than six months of age. High nitrate levels in drinking water can cause blue-baby syndrome. Nitrate levels may rise quickly for short periods of time because of rainfall or agricultural activity. If you are caring for an infant, you should ask for advice from your health care provider.
  - (b) May write its own educational statement, but only in consultation with the department.
- (3) Systems which detect lead above the action level in more than five percent, and up to and including ten percent, of homes sampled:
- (a) Must include a short informational statement about the special impact of lead on children using language such as: Infants and young children are typically more vulnerable to lead in drinking water than the general population. It is possible that lead levels at your home may be higher than at other homes in the community as a result of materials used in your home's plumbing. If you are concerned about elevated lead levels in your home's water, you may wish to have your water tested and flush your tap for thirty seconds to two minutes before using tap water. Additional information is available from the Safe Drinking Water Hotline (800-426-4791).
  - (b) May write its own educational statement, but only in consultation with the department.
- (4) Community water systems that detect TTHM above 0.080 mg/l, but below the MCL in WAC 246-290-310(4), as an annual average, monitored and calculated under the provisions of WAC 246-290-300(6), must include health effects language prescribed by WAC 246-290-72012.

(<u>(5)</u> Beginning in the report due by July 1, 2002, and ending January 22, 2006, a community water system that detects arsenic above 0.01 mg/L and up to and including 0.05 mg/L must include the arsenic health effects language prescribed in WAC 246-290-71012.)

[Statutory Authority: RCW 43.20.050. 00-15-080, § 246-290-72010, filed 7/19/00, effective 8/19/00.]

**WAC 246-290-72011** Report delivery and recordkeeping. Each community water system must mail or otherwise directly deliver one copy of the report to each customer.

- (1) The system must make a good faith effort to reach consumers who do not get water bills. The department expects that an adequate good faith effort will be tailored to the consumers who are served by the system but are not bill-paying customers, such as renters or workers. A good faith effort to reach consumers would include a mix of methods appropriate to the particular system such as: Posting the reports on the internet; mailing to postal patrons in metropolitan areas; advertising the availability of the report in the news media; publication in a local newspaper; posting in public places such as cafeterias or lunch rooms of public buildings; delivery of multiple copies for distribution by single-biller customers such as apartment buildings or large private employers; delivery to community organizations.
- (2) No later than the date the system is required to distribute the report to its customers, each community water system must mail a copy of the report to the department, followed within three months by a certification that the report has been distributed to customers, and that the information is correct and consistent with the compliance monitoring data previously submitted to the department.
- (3) No later than the date the system is required to distribute the report to its customers, each community water system must deliver the report to any other agency or clearinghouse identified by the department.
  - (4) Each community water system must make its reports available to the public upon request.
- (5) Each community water system serving one hundred thousand or more persons must post its current year's report to a publicly accessible site on the internet.
- (6) Any system subject to WAC 246-290-72001 through 246-290-72012 must retain copies of its consumer confidence report for no less than three years.

[Statutory Authority: RCW 43.20.050. 00-15-080, § 246-290-72011, filed 7/19/00, effective 8/19/00.]

### WAC 246-290-72012 Regulated contaminants.

Contaminant	traditional	to convert	MCL in	MCLG	Major	Health Effects			
(units)	MCL in	for CCR,	CCR		Sources in	Language			
	mg/L	multiply by	units		Drinking				
					Water				
Microbiological Contaminants									

Total Coliform Bacteria	MCL: (systems that collect 40 samples/ month) 5% of monthly samples are positive; (systems that collect < 40 samples/ month) 1 positive monthly sample	MCL: (system s that collect 40 sample s/ month) 5% of monthly sample s are positive; (system s that collect < 40 sample s/ month) 1 positive monthly sample	0	Naturally present in the environment	Coliforms are bacteria that are naturally present in the environment and are used as an indicator that other, potentially-harmful, bacteria may be present. Coliforms were found in more samples than allowed and this was a warning of potential problems.
Fecal coliform and E. coli	0	0	0	Human and animal fecal waste	Fecal coliforms and <i>E. coli</i> are bacteria whose presence indicates that the water may be contaminated with human or animal wastes. Microbes in these wastes can cause short-term effects, such as diarrhea, cramps, nausea, headaches, or other symptoms. They may pose a special health risk for infants, young children, (some of the elderly.) and people with severely-compromised immune systems.

Total organic carbon (ppm)	Π	_	TT	n/a	Naturally present in the environment	Total organic carbon (TOC) has no health effects. However, total organic carbon provides a medium for the formation of disinfection by products. These byproducts include trihalomethanes (THMs) and haloacetic acids (HAAs). Drinking water containing these byproducts (in excess of the MCL) _may lead to adverse health effects, liver or kidney problems, or nervous system effects, and may lead to an increased risk of getting cancer.
Radioactive Contain	minants	-	π	n/a	Soil runoff	Turbidity has no health effects. However, turbidity can interfere with disinfection and provide a medium for microbial growth. Turbidity may indicate the presence of disease-causing organisms. These organisms include bacteria, viruses, and parasites that can cause symptoms such as nausea, cramps, diarrhea and associated headaches.

				<u>O</u> )		radiation. Some people who drink water containing beta and photon emitters in excess of the MCL over many years may have an increased risk of getting cancer.
(*Effective 12/08/03)	15 pCi/l	-	15	n/a)	Erosion of natural deposits	Certain minerals are radioactive and may emit a form of radiation known as alpha radiation. Some people who drink water containing alpha emitters in excess of the MCL over many years may have an increased risk of getting cancer.
(pCi/l)  (*Effective 12/08/03)	5 pCi/l		5	n/a ( <u>0</u> )	Erosion of natural deposits	Some people who drink water containing radium 226 or 228 in excess of the MCL over many years may have an increased risk of getting cancer.
	30 micro g/l	Ξ	30	<u>0</u>	Erosion of natural deposits	Some people who drink water containing uranium in excess of the MCL over many years may have an increased risk of getting cancer and kidney toxicity.)

Antimony (ppb)	.006	1000	6	6	Discharge from petroleum refineries; fire retardants; ceramics; electronics; solder	Some people who drink water containing antimony well in excess of the MCL over many years could experience increases in blood cholesterol and decreases in blood sugar.
Arsenic (ppb)  (*effective 1/23/06	.05 <u>0.01</u>	1000	50 10	n/a <u>O</u> )	Erosion of natural deposits; Runoff from orchards; Runoff from glass and electronics production wastes	Some people who drink water containing arsenic in excess of the MCL over many years could experience skin damage or problems with their circulatory system, and may have an increased risk of getting cancer.
Asbestos (MFL)	7 MFL	-	7	7	Decay of asbestos cement water mains; Erosion of natural deposits	Some people who drink water containing asbestos in excess of the MCL over many years may have an increased risk of developing benign intestinal polyps.
Barium (ppm)	2	-	2	2	Discharge of drilling wastes; Discharge from metal refineries; Erosion of natural deposits	Some people who drink water containing barium in excess of the MCL over many years could experience an increase in their blood pressure.
Beryllium (ppb)	.004	1000	4	4	Discharge from metal refineries and coal-burning factories; Discharge from electrical, aerospace, and defense industries	Some people who drink water containing beryllium well in excess of the MCL over many years could develop intestinal lesions.

Cadmium (ppb)	.005	1000	5	5	Corrosion of galvanized pipes; Erosion of natural deposits; Discharge from metal refineries; Runoff from waste batteries and paints	Some people who drink water containing cadmium in excess of the MCL over many years could experience kidney damage.
Chromium (ppb)	.1	1000	100	100	Discharge from steel and pulp mills; Erosion of natural deposits	Some people who use water containing chromium well in excess of the MCL over many years could experience allergic dermatitis.
Copper (ppm)	AL.=1.3	-	AL.=1.3	1.3	Corrosion of household plumbing systems; Erosion of natural deposits; Leaching from wood preservative s	Copper is an essential nutrient, but some people who drink water containing copper in excess of the action level over a relatively short amount of time could experience gastrointestinal distress. Some people who drink water containing copper in excess of the action level over many years could suffer liver or kidney damage. People with Wilson's Disease should consult their personal doctor.
Cyanide (ppb)	.2	1000	200	200	Discharge from steel/metal factories; Discharge from plastic and fertilizer factories	Some people who drink water containing cyanide well in excess of the MCL over many years could experience nerve damage or problems with their thyroid.

Fluoride (ppm)	4		4	4	Erosion of natural deposits; Water additive which promotes strong teeth; Discharge from fertilizer and aluminum factories	Some people who drink water containing fluoride in excess of the MCL over many years could get bone disease, including pain and tenderness of the bones. Fluoride in drinking water at half the MCL or ((greater)) (more) may cause mottling of children's teeth, usually in children less than nine years old. Mottling, also known as dental fluorosis, may include brown staining and/or pitting of the teeth, and occurs only in developing teeth before they erupt from the gums.
Lead (ppb)	AL.=.015	1000	AL.=15	0	Corrosion of household plumbing systems; Erosion of natural deposits	Infants and children who drink water containing lead in excess of the action level could experience delays in their physical or mental development. Children could show slight deficits in attention span and learning abilities. Adults who drink this water over many years could develop kidney problems or high blood pressure.

Mercury [inorganic] (ppb)	.002	1000	2	2	Erosion of natural deposits; Discharge from refineries and factories; Runoff from landfills; Runoff from cropland	Some people who drink water containing inorganic mercury well in excess of the MCL over many years could experience kidney damage.
Nitrate (ppm)	10	-	10	10	Runoff from fertilizer use; Leaching from septic tanks, sew- age; Erosion of natural deposits	Infants below the age of six months who drink water containing nitrate in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.
Nitrite (ppm)	1	-	1	1	Runoff from fertilizer use; Leaching from septic tanks, sew- age; Erosion of natural deposits	Infants below the age of six months who drink water containing nitrite in excess of the MCL could become seriously ill and, if untreated, may die. Symptoms include shortness of breath and blue baby syndrome.
Selenium (ppb)	.05	1000	50	50	Discharge from petroleum and metal refineries; Erosion of natural deposits; Discharge from mines	Selenium is an essential nutrient. However, some people who drink water containing selenium in excess of the MCL over many years could experience hair or fingernail losses, numbness in fingers or toes, or problems with their circulation.

Thallium (ppb)	.002	1000	2	0.5	Leaching from ore- processing sites; Discharge from electronics, glass, and drug factories	Some people who drink water containing thallium in excess of the MCL over many years could experience hair loss, changes in their blood, or problems with their kidneys, intestines, or liver.
Synthetic Organ	nic Contamir	nants includin	g Pesticide	es and He	erbicides	
2,4-D (ppb)	.07	1000	70	70	Runoff from herbicide used on row crops	Some people who drink water containing the weed killer 2,4-D well in excess of the MCL over many years could experience problems with their kidneys, liver, or adrenal glands.
2,4,5-TP [Silvex](ppb)	.05	1000	50	50	Residue of banned herbicide	Some people who drink water containing silvex in excess of the MCL over many years could experience liver problems.
Acrylamide	π	-	π	0	Added to water during sewage/ wastewater treatment	Some people who drink water containing high levels of acrylamide over a long period of time could have problems with their nervous system or blood, and may have an increased risk of getting cancer.

Alachlor (ppb)	.002	1000	2	0	Runoff from herbicide used on row crops	Some people who drink water containing alachlor in excess of the MCL over many years could have problems with their eyes, liver, kidneys, or spleen, or experience anemia, and may have an increased risk of getting cancer.
Atrazine (ppb)	.003	1000	3	3	Runoff from herbicide used on row crops	Some people who drink water containing atrazine well in excess of the MCL over many years could experience problems with their cardiovascular system or reproductive difficulties.
Benzo(a)pyrene [PAH] (nanograms/l)	.0002	1,000,000	200	0	Leaching from linings of water storage tanks and distribution lines	Some people who drink water containing benzo(a)pyrene in excess of the MCL over many years may experience reproductive difficulties and may have an increased risk of getting cancer.
Carbofuran (ppb)	.04	1000	40	40	Leaching of soil fumigant used on rice and alfalfa	Some people who drink water containing carbofuran in excess of the MCL over many years could experience problems with their blood, or nervous or reproductive systems.

Chlordane (ppb)	.002	1000	2	0	Residue of banned termiticide	Some people who drink water containing chlordane in excess of the MCL over many years could experience problems with their liver or nervous system, and may have an increased risk of getting cancer.
Dalapon (ppb)	.2	1000	200	200	Runoff from herbicide used on rights of way	Some people who drink water containing dalapon well in excess of the MCL over many years could experience minor kidney changes.
Di(2-ethylhexyl) adipate (ppb)	.4	1000	400	400	Discharge from chemical factories	Some people who drink water containing di (2-ethylhexyl) adipate well in excess of the MCL over many years could experience general toxic effects or reproductive difficulties.
Di(2-ethylhexyl) phthalate (ppb)	.006	1000	6	0	Discharge from rubber and chem- ical factories	Some people who drink water containing di (2-ethylhexyl) phthalate in excess of the MCL over many years may have problems with their liver, or experience reproductive difficulties, and may have an increased risk of getting cancer.

Dibromochloropro pane (ppt)	.0002	1,000,000	200	0	Runoff/leach ing from soil fumigant used on soybeans, cotton, pineapples, and orchards	Some people who drink water containing DBCP in excess of the MCL over many years could experience reproductive problems and may have an increased risk of getting cancer.
Dinoseb (ppb)	.007	1000	7	7	Runoff from herbicide used on soybeans and vegetables	Some people who drink water containing dinoseb well in excess of the MCL over many years could experience reproductive difficulties.
Diquat (ppb)	.02	1000	20	20	Runoff from herbicide use	Some people who drink water containing diquat in excess of the MCL over many years could get cataracts.
Dioxin [2,3,7,8- TCDD] (ppq)	.00000003	1,000,000,0	30	0	Emissions from waste incineration and other combustion; Discharge from chemical factories	Some people who drink water containing dioxin in excess of the MCL over many years could experience reproductive difficulties and may have an increased risk of getting cancer.
Endothall (ppb)	.1	1000	100	100	Runoff from herbicide use	Some people who drink water containing endothall in excess of the MCL over many years could experience problems with their stomach or intestines.
Endrin (ppb)	.002	1000	2	2	Residue of banned insecticide	Some people who drink water containing endrin in excess of the MCL over many years could experience liver problems.

Epichlorohydrin	π	-	π	0	Discharge from industrial chemical factories; An impurity of some water treatment chemicals	Some people who drink water containing high levels of epichlorohydrin over a long period of time could experience stomach problems, and may have an increased risk of getting cancer.
Ethylene dibromide (ppt)	.00005	1,000,000	50	0	Discharge from petroleum refineries	Some people who drink water containing ethylene dibromide in excess of the MCL over many years could experience problems with their liver, stomach, reproductive system, or kidneys, and may have an increased risk of getting cancer.
Glyphosate (ppb)	.7	1000	700	700	Runoff from herbicide use	Some people who drink water containing glyphosate in excess of the MCL over many years could experience problems with their kidneys or reproductive difficulties.
Heptachlor (ppt)	.0004	1,000,000	400	0	Residue of banned pesticide	Some people who drink water containing heptachlor in excess of the MCL over many years could experience liver damage and may have an increased risk of getting cancer.

Heptachlor epoxide (ppt)	.0002	1,000,000	200	0	Breakdown of heptachlor	Some people who drink water containing heptachlor epoxide in excess of the MCL over many years could experience liver damage, and may have an increased risk of getting cancer.
Hexachlorobenzen e (ppb)	.001	1000	1	0	Discharge from metal refineries and agricultural chemical factories	Some people who drink water containing hexachlorobenzene in excess of the MCL over many years could experience problems with their liver or kidneys, or adverse reproductive effects, and may have an increased risk of getting cancer.
Hexachlorocyclo- pentadiene (ppb)	.05	1000	50	50	Discharge from chemical factories	Some people who drink water containing hexachlorocyclopen tadiene well in excess of the MCL over many years could experience problems with their kidneys or stomach.
Lindane (ppt)	.0002	1,000,000	200	200	Runoff/leach ing from insecticide used on cattle, lumber, gardens	Some people who drink water containing lindane in excess of the MCL over many years could experience problems with their kidneys or liver.

Methoxychlor (ppb)	.04	1000	40	40	Runoff/leach ing from insecticide used on fruits, vegetables, alfalfa, livestock	Some people who drink water containing methoxychlor in excess of the MCL over many years could experience reproductive difficulties.
Oxamyl [Vydate] (ppb)	.2	1000	200	200	Runoff/leach ing from insecticide used on apples, potatoes and tomatoes	Some people who drink water containing oxamyl in excess of the MCL over many years could experience slight nervous system effects.
PCBs [Polychlorinated biphenyls] (ppt)	.0005	1,000,000	500	0	Runoff from landfills; Discharge of waste chemicals	Some people who drink water containing PCBs in excess of the MCL over many years could experience changes in their skin, problems with their thymus gland, immune deficiencies, or reproductive or nervous system difficulties, and may have an increased risk of getting cancer.
Pentachlorophenol (ppb)	.001	1000	1	0	Discharge from wood preserving factories	Some people who drink water containing pentachlorophenol in excess of the MCL over many years could experience problems with their liver or kidneys, and may have an increased risk of getting cancer.

Picloram (ppb)	.5	1000	500	500	Herbicide runoff	Some people who drink water containing picloram in excess of the MCL over many years could experience problems with their liver.
Simazine (ppb)	.004	1000	4	4	Herbicide runoff	Some people who drink water containing simazine in excess of the MCL over many years could experience problems with their blood.
Toxaphene (ppb)	.003	1000	3	0	Runoff/leach ing from insecticide used on cotton and cattle	Some people who drink water containing toxaphene in excess of the MCL over many years could have problems with their kidneys, liver, or thyroid, and may have an increased risk of getting cancer.
Volatile Organic C	ontaminants	3				
Benzene (ppb)	.005	1000	5	0	Discharge from factories; Leaching from gas storage tanks and landfills	Some people who drink water containing benzene in excess of the MCL over many years could experience anemia or a decrease in blood platelets, and may have an increased risk of getting cancer.
Bromate (ppb)	.010	1000	10	0	By-product of drinking water chlorination	Some people who drink water containing bromate in excess of the MCL over many years may have an increased risk of getting cancer.

Carbon tetrachloride (ppb)	.005	1000	5	0	Discharge from chemical plants and other industrial activities	Some people who drink water containing carbon tetrachloride in excess of the MCL over many years could experience problems with their liver and may have an increased risk of getting cancer.
Chloramines (ppm)	MRDL .= 4	-	MRDL. =4	MRDL G .=4	Water additive used to control microbes	getting cancer.  Some people who ((contact)) ( use) drinking water containing chloramines well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chloramines well in excess of the MRDL could experience stomach discomfort or anemia.
Chlorine (ppm)	MRDL .= 4	-	MRDL. =4	MRDL G .=4	Water additive used to control microbes	Some people who ((contact)) ( use) drinking water containing chlorine well in excess of the MRDL could experience irritating effects to their eyes and nose. Some people who drink water containing chlorine well in excess of the MRDL could experience stomach discomfort.

Chlorite (ppm)	1	-	1	0.8	By-product of drinking water chlorination	Some infants and young children who drink water containing chlorite in excess of the MCL could experience nervous system effects. Similar effects may occur in fetuses of pregnant mothers who drink water containing chlorite in excess of the MCL. Some people may experience anemia.
Chlorine dioxide (ppb)	MRDL .= .8	1000	MRDL .=800	MRDL G .= 800	Water additive used to control microbes	Some infants and young children who drink water containing chlorine dioxide in excess of the MRDL could experience nervous system effects. Similar effects may occur in fetuses of pregnant mothers who drink water containing chlorine dioxide in excess of the MRDL. Some people may experience anemia.
Chlorobenzene (ppb)	.1	1000	100	100	Discharge from chemical and agricultural chemical factories	Some people who drink water containing chlorobenzene in excess of the MCL over many years could experience problems with their liver or kidneys.
o-Dichlorobenzene (ppb)	.6	1000	600	600	Discharge from industrial chemical factories	Some people who drink water containing odichlorobenzene well in excess of the MCL over many years could experience problems with their liver, kidneys, or circulatory systems.

p-Dichlorobenzene (ppb)	.075	1000	75	75	Discharge from industrial chemical factories	Some people who drink water containing p-dichlorobenzene in excess of the MCL over many years could experience anemia, damage to their liver, kidneys, or spleen, or changes in their blood.
1,2- Dichloroethane (ppb)	.005	1000	5	0	Discharge from industrial chemical factories	Some people who drink water containing 1,2-dichloroethane in excess of the MCL over many years may have an increased risk of getting cancer.
1,1- Dichloroethylene (ppb)	.007	1000	7	7	Discharge from industrial chemical factories	Some people who drink water containing 1,1-dichloroethylene in excess of the MCL over many years could experience problems with their liver.
cis-1,2- Dichloroethylene (ppb)	.07	1000	70	70	Discharge from industrial chemical factories	Some people who drink water containing cis-1,2-dichloroethylene in excess of the MCL over many years could experience problems with their liver.
trans-1,2- Dichloroethylene (ppb)	.1	1000	100	100	Discharge from industrial chemical factories	Some people who drink water containing trans-1,2-dichloroethylene well in excess of the MCL over many years could experience problems with their liver.

Dichloromethane (ppb)	.005	1000	5	0	Discharge from pharmaceuti cal and chemical factories	Some people who drink water containing dichloromethane in excess of the MCL over many years could have liver problems and may have an increased risk of getting cancer.
1,2- Dichloropropane (ppb)	.005	1000	5	0	Discharge from industrial chemical factories	Some people who drink water containing 1,2-dichloropropane in excess of the MCL over many years may have an increased risk of getting cancer.
Ethylbenzene (ppb)	.7	1000	700	700	Discharge from petroleum refineries	Some people who drink water containing ethylbenzene well in excess of the MCL over many years could experience problems with their liver or kidneys.
Haloacetic Acids (HAA) (ppb)	.060	1000	60	n/a	By-product of drinking water disinfection	Some people who drink water containing haloacetic acids in excess of the MCL over many years may have an increased risk of getting cancer.
Styrene (ppb)	.1	1000	100	100	Discharge from rubber and plastic factories; Leaching from landfills	Some people who drink water containing styrene well in excess of the MCL over many years could have problems with their liver, kidneys, or circulatory system.

Tetrachloroethylen e (ppb)	.005	1000	5	0	Discharge from factories and dry cleaners	Some people who drink water containing tetrachloroethylene in excess of the MCL over many years could have problems with their liver, and may have an increased risk of getting cancer.
1,2,4- Trichlorobenzene (ppb)	.07	1000	70	70	Discharge from textile- finishing factories	Some people who drink water containing 1,2,4-trichlorobenzene well in excess of the MCL over many years could experience changes in their adrenal glands.
1,1,1- Trichloroethane (ppb)	.2	1000	200	200	Discharge from metal degreasing sites and other factories	Some people who drink water containing 1,1,1-trichloroethane in excess of the MCL over many years could experience problems with their liver, nervous system, or circulatory system.
1,1,2- Trichloroethane (ppb)	.005	1000	5	3	Discharge from industrial chemical factories	Some people who drink water containing 1,1,2-trichloroethane well in excess of the MCL over many years could have problems with their liver, kidneys, or immune systems.
Trichloroethylene (ppb)	.005	1000	5	0	Discharge from metal degreasing sites and other factories	Some people who drink water containing trichloroethylene in excess of the MCL over many years could experience problems with their liver and may have an increased risk of getting cancer.

TTHMs [Total trihalomethanes] (ppb)	0.10/.080	1000	100/80	n/a	By-product of drinking water chlorination	Some people who drink water containing trihalomethanes in excess of the MCL over many years may experience problems with their liver, kidneys, or central nervous systems, and may have an increased risk of getting cancer.
Toluene (ppm)	1	-	1	1	Discharge from petroleum factories	Some people who drink water containing toluene well in excess of the MCL over many years could have problems with their nervous system, kidneys, or liver.
Vinyl Chloride (ppb)	.002	1000	2	0	(Leaching from PVC piping:) Discharge from plastics factories	Some people who drink water containing vinyl chloride in excess of the MCL over many years may have an increased risk of getting cancer.
Xylenes (ppm)	10	-	10	10	Discharge from petroleum factories; Discharge from chemical factories	Some people who drink water containing xylenes in excess of the MCL over many years could experience damage to their nervous system.

# <u>Key</u>

AL.=Action Level

**MCL**.=Maximum Contaminant Level

MCLG.=Maximum Contaminant Level Goal

MFL.=million fibers per liter

MRDL.=Maximum Residual Disinfectant Level

MRDLG.=Maximum Residual Disinfectant Level Goal

mrem/year.=millirems per year (a measure of radiation absored by the body)

N/A.=Not Applicable

NTU.=Nephelometric Turbidity Units (a measure of water clarity)

pCi/1.=picocuries per liter (a measure of radioactivity)

ppm.=parts per million, or milligrams per liter (mg/1)

ppb.=parts per billion, or micrograms per liter (g/1)

ppt.=parts per trillion, or nanograms per liter

ppq.=parts per quadrillion, or picograms per liter

TT.=Treatment Technique

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